Serial No.: 09/648,019
Group Art Unit: 2633
Examiner: David C. Payne

REMARKS

Claims 1, 3, 4, 6, 7, and 9 remain in this application. Claims 2, 5 and 8 have been cancelled. Claims 1, 4, 6 and 7 have been amended. Claims 10 through 15 have been added.

Allowable Subject Matter

The Office Action indicated that claims 5 and 6 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Though the claims are allowable over the prior art, in order to further prosecution and quickly obtain patent protection, claim 4 has been amended to include the limitations of claim 5 and claim 6 has been amended to be in independent form to include the limitations of claim 4.

Claim Rejections under 35 U.S.C. Section 103

Claims 1 through 3 and 7 through 9 were rejected as being unpatentable over the Czarnoch reference in view of the Torihata reference. However, the references either alone or in combination do not disclose the elements of the claims.

Independent Claim 1 and dependent claim 2

With respect to claim 1, the Czarnoch reference and the Torihata reference fail to disclose the requirements, *inter alia*, of, "means for detecting whether a predetermined number of received valid signals are present at a predetermined number of the multiple demodulators; and means for activating the shutdown input of the optical amplifier if the predetermined number of received valid signals is not detected." The Czarnoch reference states at column 5, lines 29 through 34, "According to the principles of the invention, a loss of signal in the information-bearing optical signals (referred hereinafter as "traffic signals") and loss of supervisory signal is detected (step 201 in Fig. 2), in a conventional manner, *at the input of downstream optical amplifier* 121 as a result of fiber cut 150 in optical fiber path 130."

From this description, the Czarnocha reference is measuring the loss of signal at the input of the optical amplifier in the conventional manner. This detection of loss of signal in the Czarnocha reference has the disadvantages discussed at page 8, lines 21 through 25 that the reduction in received optical power may not fall below a detector threshold. The present invention realizes this problem and solves it by detecting whether a predetermined number of received valid signals are present at a predetermined number of the multiple demodulators, as required by claim 1. The Czarnocha reference does not even realize or address the problem, nevertheless even suggest a solution or in anyway teach the present invention.

The Torihata reference fails to add to the teachings of the Czarnocha to disclose or suggest the requirements of claim 1, *inter alia*, of, "means for detecting whether a predetermined number of received valid signals are present at a predetermined number of the multiple demodulators; and means for activating the shutdown input of the optical amplifier if the predetermined number of received valid signals is not detected." The Torihata reference no where discloses using a loss of signal from a demodulator for shutdown of an optical amplifier or even determining if a predetermined number of multiple demodulators are receiving a valid signal or activating shutdown of an optical amplifier if a predetermined number of valid signals are not detected.

The combination of the Torihata reference and the Czarnocha reference does not teach or suggest the requirements of the claims either. As stated above, the Czarnocha reference is measuring the loss of signal at the input of the optical amplifier in the conventional manner and does not even realize or address the problem, nevertheless even suggest a solution or in anyway teach the present invention. Adding the teachings of the Torihata reference does not meet the requirements of the claims, because the Torihata reference also does not realize or address the problem of the present invention or teach using a loss of signal from a demodulator for shutdown of an optical amplifier.

Independent Claim 7 and dependent claim 9

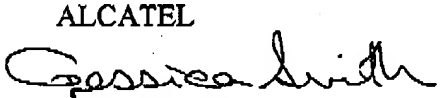
With respect to claim 7, the Czarnoch reference and the Torihata reference fail to disclose the requirements, inter alia, of, "detecting whether a predetermined number of valid signals are present at the demodulators; and activating the shutdown input of the optical amplifier if the predetermined number of valid signals is not detected." As explained previously, the Czarnocha reference is measuring the loss of signal at the input of the optical amplifier in the conventional manner and does not even realize or address the problem, nevertheless even suggest a solution or in anyway teach the present invention. Adding the teachings of the Torihata reference does not meet the requirements of the claims, because the Torihata reference also does not realize or address the problem of the present invention or teach using a loss of signal from a demodulator for shutdown of an optical amplifier.

Conclusion

For the above reasons, the foregoing amendment places the Application in condition for allowance. Therefore, it is respectfully requested that the rejection of the claims be withdrawn and full allowance granted. Should the Examiner have any further comments or suggestions, please contact Jessica Smith at (972) 477-9109.

Respectfully submitted,

ALCATEL



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